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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,519	11/30/2001	Etienne Degand	4004-025-30	6858

7590 08/27/2003

Patent Prosecution Services
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EXAMINER
JEFFERY, JOHN A

ART UNIT	PAPER NUMBER
3742	14

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/926,519	DEGAND ET AL.	
	Examiner	Art Unit	
	John A. Jeffery	3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8,11,12 and 14-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8,11,12 and 14-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Joint Inventors--Common Ownership Presumed

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligations under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8, 11, 12, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE3708577. DE3708577 discloses a heated windshield with a plurality of uncoated regions 8 surrounded by an electrically heated coating 6. Because the uncoated regions are devoid of any metallic material (that would potentially shield electromagnetic radiation), the uncoated regions would inherently permit the passage of

electromagnetic signals (i.e., data) therethrough. According to the abstract, such a pattern permits "adequate transmission...as well as adequate reflection of infra-red radiation." Thus, the coating functions as an electrically heatable "solar control" coating. Note also the abstract which characterizes the coating as "electrically conducting" and "heat reflective." Regarding the disposition of the "data transmission window" "adjacent" the top or bottom edge of the glazing panel, the scope and breadth of the term "adjacent" did not preclude the relative proximity of the uncoated regions to the panel edges of DE3708577.

Claims 8, 11, 12, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR2737075 in view of EP378917. FR2737075 discloses a plurality of "data transmission windows" in Fig. 1 of FR2737075 comprising the uncoated regions between coated strips 4. Because the uncoated regions are devoid of any metallic material that would potentially shield electromagnetic radiation as best seen in Fig. 4, the uncoated regions would inherently permit the passage of electromagnetic signals (i.e., data) therethrough. The claims differ from the previously cited prior art in calling for the heater coating to be a solar control layer. Although FR '075 does not expressly state the heater coating is a solar control coating, the use of such coatings as electric heater coatings for heating windshields is conventional and well known in the art as evidenced by EP378917 noting P. 2, lines 15-47. Also, Applicant admits on Page 1, lines 23-35 of the instant specification that electric heating layers with solar control properties are well known in the art to reduce overheating of the vehicle interior in

summer. In view of EP378917, it would have been obvious to one of ordinary skill in the art to use an electric heater layer with solar control properties as the heater layer in FR '075 so that some of the incident solar radiation was reflected by the heater layer thus reducing the solar radiation to the vehicle interior. Regarding the windscreen limitation recited in the preamble, the examiner finds no criticality in the panel being used as a windscreen in lieu of a rear window. Indeed, applicant admits on Page 5, lines 13-15 of the instant specification that the invention "is applicable to other automotive glazing panels" including rear windows.

Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR2737075 in view of EP378917 and further in view of Sperbeck (US5354966), or, alternatively, DE3708577 in view of Sperbeck (US5354966). The claims differ from the previously cited prior art in calling for even heat dissipation. Controlling an electric heater in a windshield to uniformly heat the same is conventional and well known in the art as evidenced by Sperbeck (US5354966) noting col. 1, line 55 - col. 2, line 12 where the problem of uniformly heating an electrically heated window is discussed--namely either (1) increasing the power applied to the bus bars, or (2) simply accepting the fact that a portion of the window may not be defogged. In view of Sperbeck (US5354966), it would have been obvious to one of ordinary skill in the art to uniformly heat the windshield of the previously described apparatus so that in order to ensure all portions of the windshield were equally defogged thereby improving safety.

Other Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The art should be both separately considered and considered in conjunction with the previously cited prior art when responding to this action. US 436, US 419 discloses a communications system for vehicles that transmit and receive data through the windshield.

Response to Arguments

Applicant's arguments filed 7/23/03 have been considered but are deemed to be moot in view of the new grounds of rejection.

Initially, regarding the windscreen limitation recited in the preamble, the examiner finds no criticality in the panel being used as a windscreen in lieu of a rear window. Indeed, applicant admits on Page 5, lines 13-15 of the instant specification that the invention "is applicable to other automotive glazing panels" including rear windows. In view of this non-criticality, merely because the panel is used for automotive windscreens in lieu of backlites provides no patentable distinction.

Regarding the examiner's inherency position pertaining to the ability of DE 577 to pass electromagnetic energy, the examiner agrees that inherency requires more than mere possibility. But the examiner disagrees that the mesh size of DE 577 would somehow completely shield electromagnetic radiation so as to not allow any radiation to pass through as applicant seems to suggest. As is well known in the art, any structure that is not totally electromagnetically shielded will allow electromagnetic energy to pass

through the structure. Shielding typically involves covering, surrounding, or encompassing the area to be shielded with a shielding material--typically metal.

But shielding must be complete to be effective. Any area that is unshielded -- however small -- will inevitably allow electromagnetic energy to leak through the shield and pass through the area. For example, when one listens to a radio inside a building, radio reception is possible only because electromagnetic energy can pass through those areas which are not shielded by metal (e.g., the windows and other non-metallic structures). Similarly, listening to a portable radio inside an automobile is possible only because electromagnetic radiation can pass through the vehicle's glass panels since radio signals cannot pass through the metallic vehicle body. Even microwave ovens -- shielded to protect the user -- inevitably leak some electromagnetic energy during operation due to gaps in the shield.

Turning to DE 577, even if the array of uncoated regions 8 were replaced with a single uncoated region, that single region would still pass electromagnetic energy since even an extremely small region will not shield all electromagnetic energy. An array of such regions would increase that effect. Therefore, the array of uncoated regions provides ample unshielded area to enable electromagnetic energy to pass unimpeded.

Applicant next argues that the central region is not adjacent to the top edge or bottom edge as claimed. However, as noted in the rejection, the term "adjacent" is extremely broad. The term simply does not preclude any region in relative proximity to another region. Although the data transmission window does not directly contact the top or bottom edges, applicant did not claim this feature. Instead, applicant claims that

the window is merely "adjacent." This limitation--given its broadest reasonable interpretation--is fully met by DE 577.

Applicant next argues that DE 577 does not suggest the presence of bus bars. The examiner respectfully disagrees. The use of bus bars is implied by DE 577--otherwise electric power could not be applied to the heating layer to heat the same. Bus bars facilitate the application of electric power to electric heater coatings in heated transparencies. Like the heater coating itself, the bus bars maintain the relative smoothness of the transparency. Indeed, an inspection of the DE 577 figure by the skilled artisan reveals that no other electrical connection technique to the heater other than bus bars would be feasible. The heating layer spans the width of the transparency and bus bars would be located on opposite sides of the heater to pass electric current through the heater. Contrary to applicant's assertion, bus bars are fairly suggested by DE 577.

Regarding applicant's argument pertaining to combining FR 075 with EP 917, applicant's argument is based primarily on the alleged lack of motivation to combine the references since FR 075 is a backlite, not a windshield. But as noted in the rejection, merely because the panel being used as a windscreen in lieu of a rear window is not critical to the invention. Indeed, applicant even admits on Page 5, lines 13-15 of the instant specification that the invention "is applicable to other automotive glazing panels" including rear windows.

Finally, applicant argues that combining Sperbeck with the other prior art is improper allegedly because it does not suggest the problem of electromagnetic energy

transmission nor mention combining a solar control coating with a data transmission window. However, these factors have nothing to do with why the examiner cited the reference. The examiner cited Sperbeck merely to show it was known in the art to uniformly heat an electrically-heated transparency. Sperbeck expressly discusses the problem of uniformly heating a transparency and its teachings readily combinable with the other cited prior art for the reasons set forth in the rejection.

Final Rejection

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this or earlier communications from the examiner should be directed to John A. Jeffery at telephone number (703) 306-4601 or fax (703) 305-3463. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM EST. The examiner can also be reached on alternate Fridays.

The fax phone numbers for the organization where this application or proceeding is assigned are:

Before Final	(703) 872-9302
After Final	(703) 872-9303
Customer Service	(703) 872-9301

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0861.

JOHN A. JEFFERY
PRIMARY EXAMINER

8/25/03